# INF2169 Printable Schedule Winter 2020

# UNIVERSITY OF TORONTO

#### **FACULTY OF INFORMATION**

INF2169 - User-Centred Information Systems Development

Course Outline - Winter 2020

Thursdays 1:00-4:00PM Bissell Building, Room 224 140 St. George Street

INSTRUCTOR: Dan Ryan
Room 651, 140 St George Street
daniel.ryan@utoronto.ca, @djjr
OFFICE HOURS: By appointment on Quercus

TEACHING ASSISTANT Yaxi Zhao yaxi.zhao@mail.utoronto.ca

### Schedule

Readings and other assignments are detailed in the "Mind map of ... " assignments in Quercus

NOTE: All assignments due Thursday at noon unless otherwise noted. Assignments are late if submitted between due date and second class following. No assignments accepted after that.

### 10 Jan Course Overview & Set Up

- Read about course policies
- A01 Course Preliminaries (due 16 Jan)
- A49 Start a Design Sketchbook (due 16 Jan)
- A50 In-Class Visualization Exercise #1 (due 16 Jan)
- A51 What is Design? (due 16 Jan)
- A02 IWIDT open topic (due 16 Jan)
- A28 Mind map of "Play Better with Others" readings (due 16 Jan)

### 17 Jan Teaming: How to Work/Play Better with Others

- A06 In-Class Visualization Exercise #2 (due 23 Jan)
- A03 Design History Mind Map (due 23 Jan)
- A26 IWIDT something you can play with (due 23 Jan)

### 24 Jan Design and Users from Hyde Park to Xerox PARC

• A10 In-Class Visualization Exercise #3 (due 30 Jan)

- A08 Workshop Draft 0: Audience, Promo and Vision (due 30 Jan)
- A05 IWIDT DesignTO (Design Week Toronto) (due 30 Jan)
- A07 Mind Map of Creative Problem Solving Readings (due 30 Jan)

### 31 Jan Creative Problem Solving

- A16 In-Class Visualization Exercise #4 (due 6 Feb)
- A14 Feedback on Draft 0 (due 6 Feb\*)
- A54 Workshop Background Research #1 (due 6 Feb)
- A09 IGIDNDT text artifact about how to use something (due 6 Feb)
- A11 Mind Map of Watching, Listening, and Finding Out Readings (due 6 Feb)

### 7 Feb Watching, Listening, and Finding Out

- A21 In-Class Visualization Exercise #5 (due 13 Feb)
- A18 Workshop Draft 1: Ice Breaker, Design Challenge, Research Phase (due 13 Feb)
- A15 IWIDT containers (due 13 Feb)
- A17 Mind Map of "Empathy is a Verb" Readings (due 13 Feb)

### 14 Feb Empathy is a Verb: From Observation to Insight

- Sketchbook Midterm Review (due 14 Feb)
- A19 Collegial Feedback on Draft 1: Ice Breaker, Challenge, Research (due 14 Feb\*)
- A27 In-Class Visualization Exercise #6 (due 27 Feb)
- A24 Workshop Draft 2: From Observations to Insights to POV to HMW (due 27 Feb)
- A20 IGIDNDT service (due 27 Feb)
- A22 Mind Map of Cultivating Creativity Readings (due 27 Feb)

### 28 Feb Cultivating Creativity: Optimizing Ideation

- A25 Collegial Feedback on Draft 2 (due 5 Mar\*)
- A33 In-Class Visualization Exercise #7 (due 5 Mar)
- A30 Workshop Draft 3: Ideation(due 5 Mar)
- A32 IGIDNDT something other people have to use (due 5 Mar)
- A34 Mind Map of Intentional Prototyping Readings (due 5 Mar)

#### 6 Mar Intentional Prototyping

- A31 Collegial Feedback on Draft 3: Ideation (due 12 Mar\*)
- A36 In-Class Visualization Exercise #8 (due 12 Mar)
- A39 Workshop draft 4: Making and Listening (due 12 Mar)
- A35 IWIDT foreign product/service (due 12 Mar)
- A37 Mind Map of DT Critique Readings (due 12 Mar)

#### 13 Mar What If It's All a Fad or Maybe Spit Out the Kool-AID

- A40 Collegial Feedback on Draft 4: Making and Listening (due 19 Mar\*)
- A41 In-Class Visualization Exercise #9 (due 19 Mar)

#### 20 Dress Rehearsal

- 20 Mar Dress Rehearsal Presentation (W10 in class)
- A43 Collegial Critique I (due 20 Mar)
- A44 Reflections on Dress Rehearsal Feedback (due 21 Mar)

#### 27 Mar Presentations

- A46a Workshop Presentation (W11 in class)
- A45 Collegial Critique II (W11 presentations) (due 2 Apr)

### **3 Apr Presentations**

- A46b Workshop Presentation (W12 in class)
- A47 Collegial Critique III (10 April)
- A48 Workshop Materials (10 April)
- Sketchbook Review (10 April)

### **POINTS** and Marks

Week	Торіс	Due noon on (unless otherwise noted)	(8 do 7) In-Class Sketch Exercises	(8 do 7) 1 Wish	(8 do 7) Mind Map of Readings	OTHER	Collegial Critique + Feedback	Workshop Drafts
ı	Intro	January 9						
2	Teams	January 16	A06	AO2	A28			
3	History	January 23	AlO	A26	A03			
4	CPS	January 30	AIG	A05	A07			AOB
5	Research	February 6	A21	A09	Ai	тва	Al4*	A54
6	Empathy	February 13	A27	AI5	AI7		A19*	Al8
7	Ideation	February 27	A33	A20	A22	TBA		A24
8	Prototyping	March 5	A36	A32	A34		A25*	A30
9	Critique	March 12	A4I	A35	A37		A3I*	A39
Ю	Dress Rehearsal	March 20					A40, A432	
1	Presentations	March 27					A44*, A45*	
12-	Presentations	April 3					A47*	
	* Feedback may be due day of class when needed							
Generic Rubric	Proportion of Course Grade	100	5	14	14	6	9	12
	Total Points	200	Ю	28	28	12	B	24
	Assignment Count		7	7	7	2	9	6
	Exceptional/Excellent	100%	1.4	4.0	4.0	6.0	2.0	4.0
	Professionally impressive	95%	1.4	3.8	3.8	5.7	1.9	3.8
	Above and beyond	90%	1.2	3.4	3.4	51	L7	3.4
	As assigned	85%	ro	2.9	2.9	4.4	15	2.9
	Missing a little	80%	0.8	2.3	2.3	3.5	1.2	2.3
	Missing a lot	70%	0.6	16	1.6	2.4	0.8	1.6
	Late	60%	0.3	I.O	I.O	15	0.5	I.O
	Not submitted	0	0.0	0.0	0.0	0.0	0.0	0.0

### Other Course Information

### Course Descriptions from Catalog

### INF2169 User-Centred Information Systems Development

Theoretical and practical implications for a user-centred perspective on the development of computerized information systems. Topics include user participation, alternative development methodologies, end-user computing, prototyping techniques, computer supported cooperative work. Emphasis on the development of systems at the workgroup level using common software packages.

### KMD2001 Human-Centred Design

An approach to design grounded in understanding the real-world practices of users and user communities. Includes traditional design practices, visual literacy and the design science of human-computer interaction, graphics, and information visualization. Specific design practices include: ecological design, participatory design, user-centered design, contextual design, etc. A variety of qualitative and quantitative evaluation methodologies will be covered in the context of a usability engineering and user-centred approach.

### **Program Learning Outcomes**

Program-level outcomes for the Master of Information (MI) program at the University of Toronto include the following:

- 1. Students understand and are conversant with fundamental concepts, theories, practices, and the diverse horizons of information disciplines, and can respond to changing information practices and needs of society. (INFO)
- 2. Students develop knowledge and values appropriate to their future exercise of economic, cultural, and/or social leadership, and thereby provide leadership in defining the social responsibility of information professionals to provide information services for all, regardless of age, educational level, or social, cultural, or ethnic background. (VALUES)
- 3. Students develop the ability to contribute through research and publication, to the continuous expansion and critical assessment of the body of knowledge underlying the information and archives sciences. (CONTRIBUTE)
- 4. Students develop an understanding of the development of theory concerning information, where it is found, and how it is used. (THEORY)
- 5. Students develop an understanding of the application of new technological developments to the preservation and communication of information, and in the identification of the impact of such developments on society. (SOCIETY)
- 6. Students continue in life-long intellectual growth beyond graduation. (LIFE)

# **Course Objectives**

For some, the involvement of users in co-designing systems is a moral imperative; for others it is an opportunity to build better, more successful, more useful systems. This course endeavors to serve both these aspirations. We will use various vocabulary, some as terms of art, others more generically. In particular, "user-oriented design methods" will be taken to encompass a whole range of specific practices

such as participatory design, user-centred design, human-centred design, design thinking, co-design, etc.

This version of the course is designed to complement, rationalize, and extend skills and tools learned in other courses. Its dual themes are "participatory" and "human centred" design and the idea of "problems worth solving." It aims to provide students with connections between theoretical foundations and practical tools to help them become sophisticated developers of information systems and knowledge media that solve real problems for real users. And by reflexively observing our own practice - in this course as well as others, the course will also prepare students for collaborating with interdisciplinary teams and users.

To accomplish this we will work to clarify the motivations and the mechanisms behind the practices and techniques we are adding to our repertoire. In contrast to conventional approaches to information systems development (ISD) in which a rational-technical model is imposed on a use case seen as either an isolated cognitive unit or mechanical organizational structure, we will conceptualize information systems and knowledge media as fundamentally social interactional processes that can be both supported and/or distorted by technology. We aim to make the designer aware of competing interests and multiple social organizational constraints surrounding any system design problem and to equip her with insights, mindsets, and tools needed to build useful things not just in spite of but even because of these.

#### **Course Outcomes:**

Upon completion of this course you should be able to:

- express a broad view of human information system and the potential for digital support and distortion (HIS)
- articulate the range of human/user-oriented approaches to design (RANGE)
- make a persuasive case for practical and symbolic value of human/user-oriented approaches (ADVOCATE)
- assess opportunities and obstacles, costs and benefits of human/user-oriented approaches to a given project (ASSESS)
- plan and organize a human/user-oriented design project (PLAN)
- collaborate on a human/user-oriented design project with colleagues and with users (COLLAB)
- apply human/user-oriented design ideas to one's own work. (LIVE)

The relationship of these course outcomes to the program outcomes is summarized in the table below.

	INFO	VALUES	CONTRIBUTE	THEORY	SOCIETY	LIFE
HIS	х	х		х	х	
RANGE	X	х	х			
ADVOCATE	х	х	х			
ASSESS	х		х			
PLAN	х		х			

COLLAB	x	x		x
LIVE	х	х		Х

### Instructional Agenda

Our *default* agenda will be that each week students will engage with texts and other media introducing a topic and (sometimes) engage in preparatory exercises based on this material PRIOR to the class session. We will endeavor to devote approximately one third of each class session to lecture/review of this material. The middle third will be an interactive workshop or simulation, and the final hour will combine collegial feedback/critique, review, and motivation of the next week's topic.

We will aim to have about one half of each week's 6-9 hours of "homework" be an opportunity to demonstrate competence on the topic of the previous week via the production of artifacts and reflections and half toward exploring new material.

Students are expected to do the reading; lectures will not in general cover the same material and substitute for having read material prior to class.

# Grading

Please consult the iSchool's Grade Interpretation Guidelines, the University Assessment and Grading Practices Policy and Guidelines on the Use of INC, SDF, & WDR. . Note that several graded assignments will be handed back before the final date to drop without penalty.

Regular weekly assignment sets and other assignments graded with points with 85% of the available points for work that is "as assigned" - correct and fulfilling the requirement of the assignment. Consistent performance at this level would correspond to the bottom of the A range for final grades. Marks may be higher or lower depending as the performance exceeds or falls short of this. In the rare case of truly excellent professional level achievement full marks might be earned but we expect this to be rare.

Late work (without prior extension) submitted between due date and start of class will not be reviewed but will receive a 60% mark. Full details on assignment point values can be found in <a href="INF2169 Points">INF2169 Points</a> and <a href="Marks">Marks</a> (https://q.utoronto.ca/courses/136326/pages/inf2169-points-and-marks).

For the course, the usual scale will apply:

A	Α+	90 -	B+	77 -	FZ**	
		100%		79%		
Α	۸	85 - 89%	В	73 -		0 -
	^			76%		69%
	۸	- 80 - 84%	B-	70 -		
'	A-			72%		

# **Writing Support**

As stated in the iSchool's Grade Interpretation Guidelines, "work that is not well written and grammatically correct will not generally be considered eligible for a grade in the A range, regardless of its quality in other respects." With this in mind, please make use of the writing support provided to graduate students by the SGS Graduate Centre for Academic Communication. The services are designed to target the needs of both native and non-native speakers and all programs are free. Please consult for more information. the current workshop schedule.

## Academic integrity

Please consult the University's site on Academic Integrity. The iSchool has a zero-tolerance policy on plagiarism as defined in section B.I.1.(d) of the University's Code of Behaviour on Academic Matters. You should acquaint yourself with the Code.

Also review the material in Cite it Right and if you require further clarification, consult the site How Not to Plagiarize.

Cite it Right covers relevant parts of the U of T Code of Behaviour on Academic Matters (1995). It is expected that all iSchool students take the Cite it Right workshop and the online quiz. Completion of the online Cite it Right quiz should be made **prior to the second week of classes.** To review and complete the workshop, visit the orientation portion of the iSkills site.

### **Accommodations**

Students with diverse learning styles and needs are welcome in this course. If you have a disability or a health consideration that may require accommodations, please feel free to approach Student Services and/or the Accessibility Services Office as soon as possible. The Accessibility Services staff are available by appointment to assess needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

### **Academic Dates**

Consult the iSchool's online calendar for various course-relevant dates (e.g., October 29 Final date to drop fall session full-year (Y) or fall session (F) courses without academic penalty).

# Statement of Acknowledgement of Traditional Land

I (we) would like to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and most recently, the Mississaugas of the Credit River. Today this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.<sup>1</sup>

# iSchool Workshops

The iSchool workshops are a series short skill sessions that are available exclusively to the iSchool community. iSchool professors, Inforum librarians, current students, alumni, and a collective of professionals and academics from each program and concentration, work together to create these unique rosters. Together with the MMSt and MI curricula, these academic, professional, and technical iSkills workshops provide a robust information and heritage graduate educational experience.

Workshop topics of particular relevance to this course will be noted by the instructor.

In an effort to ensure your success at the iSchool, key information and skills that all iSchool students must possess, regardless of program or concentration, are covered in these online orientation workshops. You should avail yourself of these sooner rather than later.